

1. In a data processing system including first and second storage devices and a host device for generating commands during the processing of a host application including a command for initiating the copying of data from storage locations in the first storage device, as a source storage device, to storage locations in the a second storage device as a destination storage device, a method responding to the command by copying data the storage locations in the source storage device to storage locations in the destination storage device, said method comprising the steps in sequence of:
 - A) establishing an operating environment by identifying storage locations in the source storage device and storage locations in the destination storage device,
 - B) making the identified storage locations in the source and destination storage devices available for use by host applications, and
 - C) copying the data from the storage locations in the source storage device to locations in the destination storage device in an ordered manner including, for each storage location in the source storage device:
 - i) copying the data from the storage location in the source storage device to the corresponding

storage location in the destination storage device, and

- ii) updating the information in the operating environment to indicate that the data has been transferred from the source storage device.

2. A method as recited in claim 1 additionally comprising the step of deleting the operating environment after said copying has been completed.

3. A method as recited in claim 2 wherein a host application generates as another command a write request to transfer data from the host application to an identified storage location in the source storage device during said ordered copying, said method including the steps of:

- i) interrupting said ordered copying in response to the write request,
- ii) copying data from the storage location in the source storage device to the corresponding storage location in the destination storage device,
- iii) re-enabling said ordered copying upon completion of said data copying, and

iv) completing the data transfer to the identified storage location in the source storage device in response to the write request.

5 4. A method as recited in claim 2 wherein a host application generates as another command one of read and write requests to transfer data between the host application and an identified storage location in the destination storage device during said ordered copying, said method including the steps of:

- i) interrupting said ordered copying in response to the request,
- ii) copying data to the identified storage location in the destination storage device from the corresponding storage location in the source storage device,
- iii) re-enabling said ordered copying upon completion of said data copying, and
- iv) completing the transfer between the host application and the identified storage location in the destination storage device.

5. A data storage facility that connects to a host device
that generates commands during the processing of host
applications wherein said data storage facility is adapted
for copying data from a set of source storage locations in
first disk storage device to a set of corresponding
destination storage locations in a second disk storage
device in response to a predetermined command from a host
application identifying the source and destination storage
locations, said facility comprising:
- 0
- A) means responsive to the predetermined command for
establishing an operating environment by identifying
source and destination storage locations,
 - B) means for enabling interaction of commands with the
all of said source and storage locations and the host
applications, and
 - C) means for copying the data from said source storage
locations to corresponding destination storage
locations in an ordered manner, and
 - D) means responsive to said copying means for updating
the operating environment to indicate data that has
been transferred by said copying means.
- 5
- 0

6. A data storage facility as recited in claim 5 additionally comprising the step of deleting the operating environment after said copying has been completed.
7. A data storage facility as recited in claim 6 wherein a host application generates as one command a write request to transfer data from the host application to an identified source storage location during said ordered copying, said copying means including:
- i) a copy program,
 - ii) means for operating said copy program in an ordered copying mode,
 - iii) means for interrupting said ordered copying operating means in response to a write request and enabling said copy program to copy data from said identified source storage location to a corresponding destination source location,
 - iv) means for re-enabling said ordered copying upon completion of said data copying, and
 - v) means for completing the data transfer to said identified source storage location in response to the write request.

8. A data storage facility as recited in claim 6 wherein a host application generates as one command one of read and write requests to transfer data between the host application and an identified destination storage location during the operation of said ordered copying means, said ordered copying means including:
- i) a copy program,
 - ii) means for operating said copy program in an ordered copying mode,
 - iii) means for interrupting said ordered copying in response to any read and write request to said identified destination source location thereby to enable said copy program to copy data from a corresponding source storage location,
 - iv) means for re-enabling said ordered copying upon completion of said data copying, and
 - v) means for completing the transfer between the host application and the identified destination storage location.